

### Table of contents

Message from State CIO and WaTech Director – James Weaver	2
Executive Summary	4
Leadership team	6
Division updates	10
Strategic Roadmap	19
COVID-19 response	26
Strategic priorities	29
By the numbers	31



# Message from State CIO and WaTech Director – James Weaver

As part of our commitment to transparency and increased communication, I am pleased to share WaTech's 2020 Annual Report. For this initial report, we are reporting on our progress from January 2019 – July 2020.

Since my appointment as agency director and state Chief Information Officer in December 2018, WaTech has focused on strategic, cost-effective technology investments that are modernizing and transforming state services for Washingtonians.



This report provides an overview of WaTech's efforts during the past 18 months. While there is still much to be done, the agency has made tremendous strides – from delivering the Microsoft 365 Enterprise Shared Tenant to launching Small Agency Services and increasing our capabilities to support a more mobile workforce. Our work to ensure government services are available online 24/7 not only saves time and money but is helping transform the way government connects with Washingtonians.

Our team is also building a strong foundation to meet the future needs of the enterprise and our state partners. Since publishing our Strategic Roadmap a year ago – a blueprint that guides WaTech's efforts to build trust and deliver value to Washington state – we have:

- Initiated nearly 20 transformative IT projects to modernize and streamline our infrastructure and transition on-premise data to the cloud.
- Increased the advancement of statewide digital government strategies by leveraging new technologies and cloud-hosted capabilities.
- Created a cybersecurity operational plan to protect state information technology assets using a centralized cybersecurity protocol.
- Expanded transparency on government IT spending through upgraded online dashboards provided by the Office of the Chief Information Officer.
- Revitalized outreach by the state Office of Privacy and Data Protection.
- Engaged and collaborated with our public and private stakeholders to drive change and innovation.

I am especially proud of how our team has responded to the impacts and challenges from the COVID-19 pandemic. Working side-by-side with our agency partners, we are delivering the technology and support needed so our state government colleagues can continue to accomplish their missions in a remote environment.

Moving forward, WaTech will continue its focus on being a trusted technology leader and IT partner of choice for Washington. We thank you for your continued partnership and look forward to ongoing achievements.





To be the trusted leader vision and technology partner of choice.

> Advancing Washington's technology strategies and services.

# our guiding principles

- Customer focused
- Deliver quality solutions
- · Lead with integrity
- People first
- Service driven





### **Executive Summary**

WaTech has made tremendous progress during the past two years after weathering multiple leadership changes, significant fiscal challenges, and intense scrutiny and criticism.

<u>A Zero-Based Budget Review by Gartner in 2018</u>, requested by the Legislature, challenged the agency to deliver more value to its customers and the state of Washington.

To meet that challenge, the agency had to redefine its core business and streamline its focus to deliver IT services that make sense for Washington.

James Weaver, appointed as WaTech's director and state Chief Information Officer by Gov. Jay Inslee in December 2018, launched a reorganization of the agency that streamlined leadership and focused staff on strategic, cost-effective technology investments to modernize and transform state services.



A key focus from the start was to open the Enterprise Shared Tenant service for business. The goal: onboard state agencies to Microsoft's cloud-based Office 365, which includes SharePoint, OneDrive and Exchange Online.

WaTech became its own first customer in order to beta test the process before onboarding other agencies. The agency migrated to the shared tenant in July 2019 and began onboarding other state agencies two months later. Today, there are 74 agencies registered in the shared tenant.

WaTech also has turned around its financial situation going from a nearly \$10 million budget deficit in July 2017 to a positive cash balance in the 2019-21 budget.

#### Additional agency highlights:

- Transformational Projects: In addition to launching the Enterprise Shared Tenant, WaTech has also taken several other actions to transform state services, including:
  - o Mainframe as a Service (MFaaS): WaTech partnered with a third-party vendor in March 2020 to transition the current on-premise mainframe environment to a cloud-based solution. The move has already identified \$2 million in annual savings and WaTech expects to pass on an additional \$2.5 million in savings annually to the state from the MFaaS contract.
  - Backup Service and Storage: In November 2019, WaTech determined its Backup Service needed to be replaced with a cloud-based solution. Existing customers will be migrated from the current Avamar hardware to our new brokered cloud-based solution. Customers will be onboarded in October November 2020. Although the details of the rate for the new service are not complete, we expect a 40-50% reduction in costs to our customers.



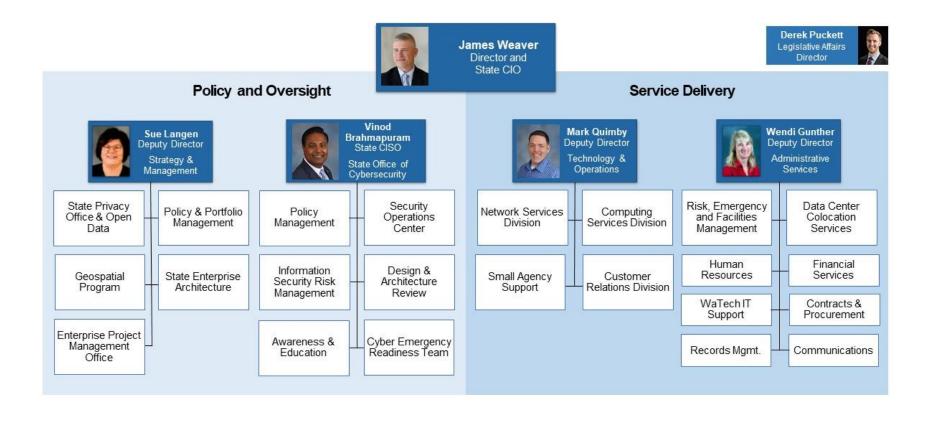
- Small Agency Support: Since July 2019, WaTech has onboarded and is providing support for 14 small agencies with the goal to increase the service offerings to other small agencies.
   As the customer base grows, agencies will benefit from economies of scale for support.
- Office of the Chief Information Officer (OCIO): Since 2019, the office has provided oversight for 132 IT projects from 52 state agencies worth nearly \$2 billion and posted data for technology investment on the online Washington State Information Technology (IT) Project Dashboard. The office also added a team of four master-level project managers to provide expert consultation and advice to gated funding projects. The team has provided more than 1,000 hours of support to 40 gated funding projects representing 32 individual state agencies.
- Office of Privacy and Data Protection (OPDP): Key initiatives during the past year include launching a new OPDP website and monthly newsletter to improve the distribution of privacy information, and revamping the annual privacy assessment survey to gather additional information that will help determine the needs and maturity of privacy programs across the spectrum of state government.
- Office of Cybersecurity (OCS): OCS is creating a sustainable cybersecurity operational plan for the state of Washington that can meet the security challenges that lie ahead. The plan takes a threat-centric approach where everyone in government works collaboratively to combat common threats because an attack on any single organization represents a potential threat to the entire enterprise. Moving forward, OCS is reviewing state policies to ensure they address the evolving threat environment, and assuring appropriate resources and authority are in place to protect state government from new and evolving cyberthreats.
- Strategic Roadmap: On August 1, 2019, WaTech published the agency's Strategic Roadmap to guide its work, rebuild trust with our customers and deliver value to Washington state. The major driver of agency decisions is the critical need for infrastructure modernization. Many of the dates identified on the roadmap are services that have a "fiscal cliff" meaning hard deadlines where a solution must be implemented, or a significant financial investment will be needed to keep the service operational. For instance, all services scheduled for decommissioning have either reached their end of life on hardware, software and/or support, or the technology has matured, and better and more affordable solutions are available in the marketplace. These projects are currently underway and have made significant progress.

The efforts highlighted above are just a few examples of WaTech's ongoing work to help the state improve the services delivered to Washingtonians.

As has been true for many state agencies, COVID-19 has had a major impact not only on our workforce, but in how this agency operates. As it became clear the COVID-19 pandemic would become the nation's greatest public health crisis in a century, WaTech teams have invested long hours to help ensure business continuity for state government, including rapidly expanding the state's ability to work remotely, combating new cyberthreats, and launching coronavirus.wa.gov, which serves as the state's central clearinghouse for information through the Joint Information Center at Camp Murray.



### Leadership team



### Key leadership changes bring strength to the agency

#### James Weaver | Director and State CIO

James (Jim) Weaver was appointed Director and State CIO for WaTech in December 2018. With more than 32 years of experience in the IT industry and having served in both management and technical positions, Jim brings a well-balanced depth of experience and innovative vision to Washington state.

He previously served as the Commonwealth of Pennsylvania's Chief Technology Officer, as well as Chief Technology Officer and Deputy Chief Information Officer for the commonwealth's Departments of Human Services, Aging and Insurance (1987 – 2018).

Since arriving in Washington, Jim has made significant strides in strengthening WaTech and the state enterprise by focusing on efficiency, consistency and continuous improvement; driving business alignment; balancing operations and policy; and seeking quicker adoption of newer technology. He has cultivated peer relationships with the chief information officers and directors of other state agencies, as well as the Legislature to capture the voice of the customer and build a community of collaboration.

Jim has a deep belief in WaTech's mission, resources and capabilities, and is driven to attain results. Working with his leadership team and agency stakeholders, he has identified the agency's priorities to move forward:

- Increased centralized cybersecurity management and accountability.
- Adoption of a brokered service model.
- Investment in innovation to meet the current and future needs of the enterprise.
- Alignment of statewide architecture to emphasize reuse and integration of existing technology.
- Leveraging advances in technology to improve communication and provide greater access to data.

#### Mark Quimby | Deputy Director of Technology & Operations

Mark Quimby was appointed Deputy Director of Technology & Operations for WaTech one year ago after serving three years as the Assistant Director of Network Services and two years as an Enterprise Data Network Manager & Service Owner and Disaster Recovery Architect. Before WaTech, he served on the Department of Corrections IT team for 17 years.

Since his appointment to Deputy Director, Mark has set his sights on propelling the agency forward by leading and supporting the efforts to implement service solutions that improve and modernize the enterprise system.



Over the past year, he has led the implementation of Microsoft Office 365 across the enterprise and the transition of the state's mainframe system to a cloud-enabled, vendor-hosted solution. He is leading and motivating the agency to improve capabilities, reduce costs and align IT strategies to the business mission, vision and guiding principles, and is getting results.

Mark is committed to ensuring that all stakeholders have a voice at the table when it comes to IT decisions. He understands and recognizes the importance of collaboration and building relationships and has invested significant time and energy into strengthening existing partnerships while also building



new ones within the IT community. This was never more evident than during the COVID-19 response as he significantly increased the amount of outreach, communication and transparency from the agency and worked closely with agency partners to develop and implement critical solutions on demand.

#### Vinod Brahmapuram | Chief Information Security Officer

Vinod Brahmapuram was appointed state Chief Information Security Officer in October 2019. Vinod oversees WaTech's state Office of Cybersecurity and is responsible for establishing and leading the strategic direction of cybersecurity for state government, as well as advising the Governor and Legislators on key cyber issues.

Vinod has more than 20 years of information technology experience with deep expertise in managing cybersecurity, developing and leading high-performing teams, and managing risk and compliance in heavily regulated environments. Before joining WaTech, he previously served as the Deputy Chief Information Security Officer for the state of South Carolina, and held several security roles for the state of New Hampshire Health and Human Services, including serving as the agency's CISO from 2015-2016.

Since Joining WaTech, Vinod has focused on strengthening the state's information security posture and creating greater cohesion and cooperation with state agency security professionals to establish an enterprise-wide view of risk. Those efforts have included creating a sustainable cybersecurity operational plan for the state of Washington to meet the security challenges that lie ahead.

In the last year, he has worked to build his team and empower them to do their job to protect the state system and data. He has focused on establishing trust and confidence with agencies and is highly engaged and transparent with the CISO community. Even with a challenging and intense year due to COVID-19, great strides have been made to unite the state IT community, working proactively and holistically to detect, respond to and prevent cyberattacks.

#### Sue Langen | Deputy Director, Strategy & Management

Sue has led the Office of the Chief Information Officer (OCIO) since 2017. In 2019, her division was reorganized to become Strategy & Management, which includes the OCIO, the Office of Privacy and Data Protection (OPDP), the State Enterprise Architect, the State Geospatial Program Office (GIS) and the Enterprise Project Management Office (EPO).



In the last few years, Sue has worked to improve and modernize the state's overall approach to technology portfolio management by overseeing the development of Washington's conceptual model. Additionally, she has overseen transformative efforts for the state's major project oversight process as well as its IT investment prioritization efforts.



#### Wendi Gunther | Deputy Director, Administrative Services

Wendi has led the Administrative Services division since 2018. Wendi joined WaTech in November of 2016 as the Chief Financial Officer. Prior to joining WaTech, she was the Budget and Finance Director at the Behavioral Health Administration within the Department of Social and Health Services and has served at several state agencies in various positions for nearly 26 years.



Over the last few years, Wendi has worked tirelessly to streamline the agency's administrative services. She recognized that aligning the administrative teams would create efficiencies to better serve WaTech and our customers. She has brought together a skilled and dedicated team who, while very lean, continue to strive for excellence in serving our staff and customers. Wendi and team are also leaders in building better communication, promoting a healthy culture and staff satisfaction. One of her most significant accomplishments is leading the efforts to reverse the agency's overspending. The agency was able to reduce spending and reverse the situation through great collaboration with WaTech's leadership and finance teams, customer stakeholders, the Office of Financial Management and the Governor's office by doing deep dives into services and spending to provide necessary core services.

#### Derek Puckett | Legislative Affairs Director

Derek was appointed to Legislative Affairs Director in February 2020. Previously, he held IT financial management roles in the public and private sector, most recently with the OCIO.

Since February, Derek has made connections with key stakeholders and external partners and worked on decision package proposals. His focus is to continue to advocate for enterprise IT policies and WaTech operational policies and improve the agency's participation in securing enterprise technology funding for IT initiatives statewide.





### Division updates

#### **Technology & Operations**

The Technology & Operations Division provides the computing power, storage, operations, network services and service support desk for many of Washington state government's core IT

> functions. The division also supports network security (in collaboration with the Office of Cybersecurity).

Below is a recap of some of the key initiatives and major accomplishments within the division over the past few years.

#### **Network Services**

With more agencies heading to the Cloud (private and public) and a host of telephony projects, Network Services has been busy and productive. Here are a few of the main projects accomplished:

- Transforming the state's Cloud Highway from a two-lane highway to a six-lane superhighway.
- Developing a pathway for deploying Internet Protocol version 6 (IPv6) for the state of Washington and initiating the final phase to make it a reality.
- Continuing to bring Point-to-Multipoint ethernet functionality to all our new circuit orders.

 Partnering with Telephony Services in continuing to add functionality to customer network connections, enabling a cost-avoidance on a grander scale for the state.

#### Telephony

The mission of the telephony team is to provide enterprise-wide phone services to state and government agencies. This is done through the Avaya and Microsoft Teams platforms, which together serve more than 50,000 employees.

Through the enterprise shared tenant, all infrastructure has been successfully implemented to facilitate a statewide migration to Microsoft Team's Telephony. This will result in reduced costs for those agencies who participate and provide a firm foundation for cloud telephony into the future. Additionally, the telephony team is evaluating enhancements in the cloud voice service delivery as it pertains to call center technology.

#### **Next Gen SMON**

WaTech is upgrading the State Metropolitan Optical Network (SMON), which delivers reliable high-speed interconnectivity between Tumwater, Lacey and Olympia for state government, to SMON 2.0. The upgrade will improve bandwidth between agency headquarters and the State Data Center (SDC) and increase data speeds by 100%.



#### WaTech Wireless

Between Jan. 1, 2019 and June 30, 2020, WaTech's Wireless Service added 514 Access Points (APs) across more than 10 state agencies, with 122 of those APs deployed in 2020 alone.

As a result, wireless is now deployed across the Department of Corrections headquarters building in Tumwater, at several DSHS facilities and many others. The team continued to make Wi-Fi available at the Potholes and Dry Falls state park, expanded wireless availability at the Goldendale Observatory and performed site

surveys for five other state park locations.

In addition to these installations, the team has finalized its design upgrade of the wireless core design.

### Computing Services

Computing Services is responsible for providing Messaging (Email, Vault Storage), Content Management (SharePoint, web hosting), Enterprise Server and Storage Management, and Mainframe services for customers.

### Enterprise Shared Tenant opens for business

The Enterprise Shared Tenant service opened for business in fall 2019 thanks to the work of the Cloud Services Team.

The project had two phases. The first phase was a "prove it" project, leading to an initial offering of SharePoint, OneDrive and Exchange Online, producing an onboarding pathway and

documentation. While the project had been in the discussion stage for years, the initial phase set a firm direction for getting it done.

As a result of that effort, WaTech formed a "Tiger Team" to get the agency onboarded as a demonstration project.

WaTech was its own first customer, overcoming the inevitable rough patches before migrating to the shared tenant in July 2019. WaTech then advised customers on Sept. 30 that the service was available for business. In addition to working through several technical issues, WaTech also addressed policy and compliance

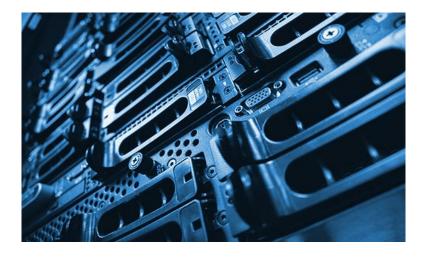
issues associated with governing a shared environment.

The second phase focused on an expanded offering, including Teams, Intune, guiding documentation, and other products. The project team

focused on creating a scalable onboarding process for agencies migrating to the shared tenant and that were interested in consuming services in the Microsoft 365 environment.

For each product offering an onboarding plan, technical guide and team organizational support plan had to be produced.

Five state agencies expressed an early interest and began the process of onboarding shortly after the service was announced. Today, there are 74 agencies registered to the shared tenant, 71 agencies registered with the Hybrid Exchange connector, 58,903 synchronized users in the Azure Active Directory and five





agencies actively engaged in migrating Exchange and Vault.

#### Washington State Cloud



WaTech's "top of rack switching" project improved data transmission to the Washington State Cloud, a

shared data storage service for state agencies hosted at the state's data centers in Olympia and Quincy.

With this project, the WaTech team routed similar types of traffic on dedicated devices, like putting bikes exclusively in a bike lane or trucks in a trucking lane. The project also added redundancy to ensure the traffic keeps moving even during times of heavy use.

Before the project could be done, an inventory had to be made of all the devices that were connected in the existing environment. That was critical to the team understanding which tenants might be impacted the most by the switch changes, and what customers would need to be told about the changes. For that reason, careful attention was given to mapping and creating documentation so the steps in the project were repeatable. Testing was also necessary to prove "real world benefits" to the customer.

After implementation, the team recorded an 18% overall decrease in "write lag" time. Some of the reconfigurations decreased traffic latency by 10-fold.

### More than 500 Virtual Machines migrate to the Washington State Cloud

This project involved migrating more than 500 virtual servers to the Washington State Cloud over a roughly 12-month period. The move allowed WaTech to retire 35 physical hosts and eliminate support contracts, VMWare and

Windows Data Center licensing that were no longer needed.

#### SecureAccess Washington (SAW)

By the end of fiscal year 2020, SAW reached 312 application integrations with over 20 agency partners. Single sign-on access was provided to three million users per month on average during this time period, and eight software builds were released to increase usability for individuals using the portal to do business with Washington state's agencies. SAW technicians worked round the clock with partner agencies during the 1,700% increase in usage of unemployment's systems in March 2020. The teams collaborated to troubleshoot and fortify systems to increase accessibility and security to users filing claims.

#### Website Services

WaTech's Website Services offers state agencies modern, usable, accessible and responsive websites. The Website Services team builds, hosts and maintains the sites while providing agencies the ability to manage their content. Currently, Website Services supports and hosts 92 websites for other state and local government agencies. With a 99.97% uptime for all websites over the past year, this team provides a stable, reliable platform that agencies depend on.

Since July 1, 2019, the Website Services team has launched 15 new websites for state government organizations and has 10 more in development today.

#### NSX Implementation project

NSX is a VMware product that improves the cybersecurity of WaTech's data centers by performing automated security, routing and monitoring functions. WaTech deployed this product in August 2020 to replace Trend Micro, which was due for renewal. NSX has the benefit of offering a more robust monitoring system,



giving us greater visibility into our tenant traffic, helping us secure workloads on a virtual-machine-to-virtual-machine basis, providing greater visibility into Layer 3 firewall security and port blocking.

The entire NSX Implementation team went the extra mile to make this project a reality, including coordinating the software implementation in phases to avoid any unplanned outages.

Because the NSX product is already integrated into the VMware environment, WaTech now enjoys a level of agility and responsiveness not possible with the previous software. The improved level of monitoring helps the agency assist customers better and allows the agency to secure workloads as requested by customers. Because NSX is included as part of VMware's licensing, this software implementation yielded significant cost savings and efficiencies to both WaTech and its customers.

#### **Small Agency Support**

In July 2019 the Small Agency Support service transitioned from fee-for-service (i.e., billed on an as-used basis) to an allocation model (bundled services or services provided on behalf of the state rather than directly to client agencies.

The goal of the allocation model is to provide tailored IT support for small agencies with limited resources, while providing current technology and a platform to prepare and adapt to future technologies as they become available.

The Small Agency Support service—which serves 14 agencies, plus four additional agencies that were not supported under the

fee-for-services—achieved several milestones, including deploying Microsoft Office 365, and implementing Exchange Online Protection and Windows Defender Advanced Threat Protection to enhance security for WaTech and all supported small agencies.

#### **Customer Support Services**

In September 2019, WaTech streamlined its Support Center to better align with customer demand, business priorities and staffing availability. The operating hours were changed to provide primary on-site support during regular business hours while maintaining emergency on-call service 24/7/365.



Donna Edwards (formerly the agency's internal IT manager) was promoted to Customer Support Services Manager in January 2020. She worked with the leadership

team to build the confidence and competency of Support Center team members as they triaged and processed nearly 300,000 customer service tickets over 18 months. With renewed confidence gained through training and leadership, the Support Center significantly reduced the average speed to answer calls (19 seconds) and the abandoned call rate (5% out of approximately 3,500 calls) by the close of the first quarter of FY2020.

Donna and team are focused on continuous improvement to reduce wait time, increase speed of resolution and enhance customer service. Donna is also leading the agency Service Management Implementation project to move WaTech forward towards standardization and alignment to ITIL practices



#### Strategy & Management

In 2019, the Office of the Chief Information Officer (OCIO) was reorganized to become the Strategy & Management division. In addition to the OCIO, the division includes the Office of Privacy and Data Protection (OPDP), the State Enterprise Architect, the State Geospatial Program Office (GIS) and the Enterprise Project Management Office (EPO).



Since 2019, the office has provided oversight for 132 IT projects from 52 state agencies worth nearly \$2 billion and posted data for technology investment on the online Washington State Information

Technology (IT) Project Dashboard.

In addition, the office added a team of four master-level project managers who have spent nearly 1,000 hours the first half of 2020 and nearly 700 hours between July and September 2020 working with individual state agencies providing project management guidance.

Master level project managers worked one-onone with agency project teams to share industry best practices and lessons learned including: Executive sponsorship, project governance, risk management and scope management.

Other accomplishments include:

Maintaining a Portfolio Management
 Dashboard that provides detailed
 information by agency on their IT spend,
 decision package requests, major
 projects under oversight and number of IT
 projects registered through the IT Project
 Assessment (IPTA) system.

- Collaborating with chief information officers (CIOs) from 15 different agencies to create an IT portfolio conceptual model for use at both the agency and enterprise level. This was the first review of the model in over 20 years and was updated to require agencies to submit a technology strategic plan.
- Improving the state geographic information portal, which enables agencies to examine shared data, confirm its accuracy and allows others to reuse the information as appropriate. Agencies and the public alike used this service more than 227,000 times to access geospatial data in 2019. That number rose to 342,000 since Jan. 1, 2020.



# State Office of Privacy & Data Protection

The Office of Privacy & Data Protection serves as the state's

central point of contact for state agencies on privacy and data protection matters.

Key initiatives during the past year include launching a new OPDP website and monthly newsletter to improve the distribution of privacy information, and revamping the annual privacy assessment survey to gather additional information that will help determine the needs and maturity of privacy programs across the spectrum of state government.

Other accomplishments include:

 Expanding and rebranding the existing Privacy Working Group into a new State Agency Privacy Forum that meets quarterly. The forum is open to any agency that wants to participate and includes privacy, data sharing and cybersecurity experts.



- Hosting regular webinars. Topics have included data breach notification, facial recognition, contact tracing, deidentification and privacy in the Public Records Act. These webinars are recorded and available on the OPDP's webpage.
- Distributing a draft Washington State Agency Privacy Principles to state agencies during the summer, which is expected to be finalized this fall. The finalized principles will help establish a common language to use when discussing, promoting and implementing privacy practices.

#### State Office of Cybersecurity

WaTech's state Office of Cybersecurity (OCS) provides strategic direction for cybersecurity and protects the state government network and state data from growing cyberthreats. OCS monitors, blocks and responds to cyberattacks to prevent and mitigate threats, and alerts agencies to these threats before they can cause significant damage to services.

The office works with state, local and federal agencies, as well as the National Guard, to share threat information and best practices, and provide incident response support to help public

organizations deal with cyberthreats. OCS also works to make everyone more aware of cyberthreats through educational outreach, holding public forums and workshops, and providing tips and advice about how to stay safe online.

During the past year the office has focused on strengthening the state's information security posture and creating greater cohesion and cooperation with state agency security professionals to establish an enterprise-wide view of risk.

The office has worked to establish trust and confidence with agencies and actively engage with the CISO community. Even with a challenging and intense year due to COVID-19, great strides have been made to unite the state IT community, working proactively and holistically to detect, respond to and prevent cyberattacks.

This past year, OCS has also begun creating a sustainable cybersecurity operational plan for the state of Washington to meet the security challenges that lie ahead. The plan takes a threat-centric approach where everyone in government works collaboratively to combat common threats because an attack on any single organization represents a potential threat to the entire enterprise.



#### **Administrative Services Division**

#### Financial overview

Unlike other state agencies that receive funding in the state budget, WaTech is a proprietary agency. This means most of the agency's revenue comes from billings to customers (e.g. state agencies, local governments, tribes).

WaTech's revenue sources are:

- 1. Fee for Service (billed on an "as-used" basis).
- 2. Central Service Model (allocated rates billed to state agencies).
- 3. Agreements (billed on an "as-agreed-to" basis).

Allocations constitute "fixed" revenue for WaTech, while Fee for Service and Agreements are variable revenue. Allocations are effectively bundled services or services provided on behalf of the state rather than directly to client agencies.



#### Financial progress over past two years

WaTech's financial status has changed dramatically over the past two years. When the FY17-19 budget opened in July 2017, the agency's fund balance had a \$9.9 million deficit due to overspending, outdated rates and providing services that were not cost recoverable.

In the 2017-19 biennium, WaTech set clear goals to ensure services would be cost recoverable, the fund balance would be restored, and that the agency would have funds to invest in future needs.

Work that was accomplished:

- Conducted a Zero-Based Budget Review report across all lines of services.
- Renegotiated with vendors to bring down costs.
- Made systemic reductions and/or decommissioned non-strategic/cost recoverable areas.
- Restructured some lines of business.
- Worked closely with the Office of Financial Management (OFM) and the Governor's office to build a plan to deliver cost recoverability and restore the fund balance.
- Implemented continual review of our operations and finances across the agency.
- Increased our engagement and partnership with our customers.
- Worked with OFM to come up with a sustainable plan for the State Data Center and funding strategy for future investments.



#### Results

- Revenue (billings to agencies) has decreased an average of 7.2% over the past two years.
- Expenditures have decreased an average of 9.9% over the past two years.
- FTE utilization has decreased 20.9% over the past two years.
- WaTech started the 19-21 budget with a positive cash balance of \$15.1 million (a net change of +\$25 million).

#### Savings Proposals

For the 21-23 biennium budget, WaTech proposed reducing the rates for the Private Cloud Service and Remote Access Service as well as reducing the Enterprise System Rate Allocation. These reductions will enable the state agencies to reduce their expenses and in turn provide savings to the state.

#### Private Cloud

WaTech proposes a temporary reduction in the Private Cloud rate by 12% in FY22 and FY23. The estimated annual saving to state agencies is \$713,200.

#### Private Cloud Rate Reduction for FY22 and FY23

	(	Current Rat	е	12% Rate Reduction				
State Data Center and Quincy Data Center	Hourly Rates	Daily Rates	Maximum Monthly	Hourly Rates	Daily Rates	Maximum Monthly		
vCPU (Core/Hour)	\$0.06	\$1.41	\$43.00	\$0.05	\$1.24	\$37.84		
Memory (GB/Hour)	\$0.01	\$0.30	\$9.00	\$0.01	\$0.26	\$7.92		
Storage (GB/Hour)	\$0.00	\$0.00	\$0.10	\$0.00	\$0.00	\$0.09		

#### Enterprise System Rate Allocation

WaTech proposes to permanently reduce the Enterprise System Rate Allocation by \$2 million annually. This funding was provided to supplement the fee-for-service Mainframe services as customer agencies moved off WaTech's on-premise platform. WaTech transitioned the service from WaTech-supported services to Mainframe as a Service (MFaaS) supported by a third-party vendor. MFaaS allows WaTech to easily scale the service up and down according to customer needs and eliminates the need for supplemental funding from the allocation.

#### Mainframe Fee-for-Service

Currently, WaTech offers Mainframe as a fee-for-service based on multiple factors (such as time of day, numbers of jobs, etc.) to arrive at the amount each agency is billed per month. As WaTech transitioned the service from on-premise to MFaaS support by a third-party vendor, WaTech proposes to simplify the rates effective July 1, 2021 (FY2022), as follows:



Description	Price Element
CPU Consumption (CPU hours used in month)	\$160/CPU hour
Reserved Capacity for Dedicated LARs	\$26,000 per LPAR
Virtual Tape	\$.30/GB
DASD	\$1.70/GB

We anticipate the estimated annual savings to agencies will be \$2.5 million.

As we migrate from legacy capital expenditures services (purchasing of equipment and infrastructure) to an operating expenditures model (cloud-based) solution, the potential for agency savings can grow. Several examples of current options are illustrated below.

- Migration into the Microsoft 365 Shared Tenant Model could result in savings up to \$7.8 million annually.
- Migration to Microsoft Teams Telephony could result in savings of at least \$4- and up to \$9 million annually.
- Transitioning from legacy VPN services to Microsoft Azure services could result in savings up to \$486,000 annually.

Additionally, as a result of the recent COVID-19 pandemic, we are also looking at facility-related savings as more staff are working remotely.

#### State Data Center

The Data Center Facilities Critical Environment (CE) team worked with its vendor in January 2020 to remove a total of 22 Local Emergency Power Off (EPO) switches from the power distribution units that supply electrical power to the data center halls in the State Data Center.

These EPO switches, which were located on the front of each unit, posed a risk of someone unintentionally powering off the unit when closing the door, resulting in a loss of power to equipment on the data hall floors, potentially disrupting critical services. By removing theses switches, the risk of an accidental power outage was reduced.

With more than 60 customers potentially impacted by this project, proper scheduling of the EPO switch removal and effective coordination with these customers was crucial.

Fortunately, thanks to the dedication of the Data Center Facilities CE team, they successfully removed the switches, helping to ensure continuity of important services.





### Strategic Roadmap

On August 1, 2019, WaTech published the agency's Strategic Roadmap, which is the blueprint to guide the agency's work to improve the agency, rebuild trust with customers and deliver value to Washington state.

The decisions that formed the Strategic Roadmap were conceived through months of collaborative planning by the agency's leadership group, stakeholders and staff. The document also considers current and future technology trends and critical modernization needs, as well as research and conclusions from the Gartner report.

The Roadmap focuses on key projects WaTech needs to address and is broken into three distinct sections: transforming operations, decommissioning services and transitioning services.

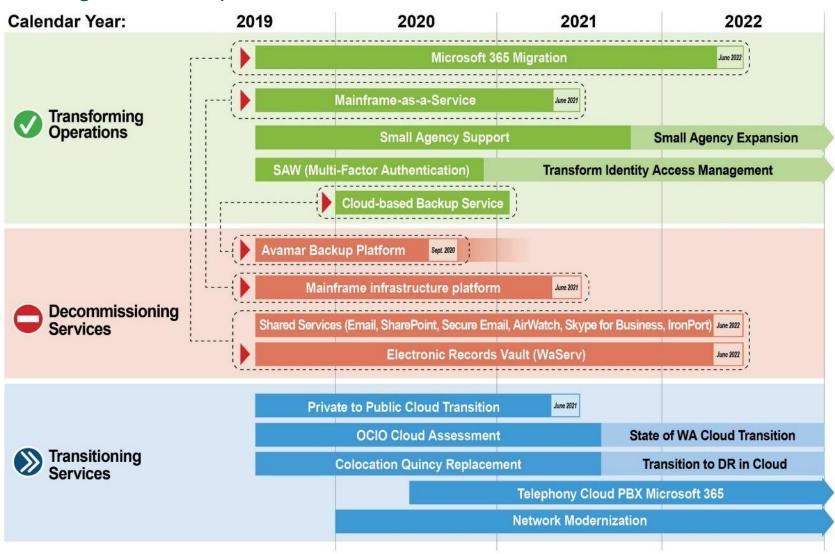
The major driver of these decisions is the critical need for infrastructure modernization. Many of the dates identified on the roadmap are services that have a "fiscal cliff"—meaning hard deadlines where WaTech must have a solution implemented or will have to make a significant financial investment to keep the service operational.

For example, all services scheduled for decommissioning have either reached the end of life on hardware, software and/or support or the technology has matured, and more advanced and affordable solutions are available in the marketplace. These projects are currently underway and have made significant progress since August 2019.

In August 2020, WaTech published a one-year progress report on the Strategic Roadmap. That progress report chart is included on the following pages as well as summary recaps for the 'transformational' projects we have been focusing on since 2019.



### Strategic Roadmap



### Strategic Roadmap – First-year progress (view higher resolution image here)

	August	September	October	November	December	January	February	March	April	May	June	July	August
Microsoft 365 Migration Replaces Shared Services (Enel, Shared Services, Securi State, Asylanti, Style for Business, IronPart		September 2019:  Operand the Enterprise Shared Tenant for business: Exchange Critine, SharePoint, OneDrive.  Defined the Big 5 steps to enable agency readness into the Enterprise Shared				Jan. 2020: Initiated Release 2 Teams, Dynamics 365 and Intune services.		March 2020: Signed contract with Quadratech to provide Vault impassion services to state agencies via Wallach - Migrated Public Foders to Modern Public Iddors in Exchange Online.	April 2020:  Published the Portals Guide and IronPort Executive Summary: Implemented Multi-factor Authoritication (MFA) for Outlook Web Access (CWA).	May 2020:  Completed M385 Release 2 Project  Launched support for Teams, Dynamics 365, and Intune services.	June 2020: Began MS65 Rolense: 3 Project, including a refresh of documentation, more fundationally on email hygene and security tools, and a guide for Power Platform	July 2020:  - Mignated Parks email to Exchange Online.  - Mignated Wallech You't data to Exchange Online Archives.	August 2020:  - Migrating DES Exphang and Vaulit to Shared Ten Leurched Advanced eCiscoway 20 in the Shared Tenant.
Septices Electronic Seconds Vault (Washery)	Electronic Seconds	Tenant.						• Regi	stered primary namespaces f Registered 71 agencies with	ino 2020: onsultations with 35 agencies. or 74 agencies to the Shared Tenant. the Hybrid Exchange connector users in Azure Active Directory.			
Mainframe-as- a-Service Replaces Mainframe infrastructure piatformi	August 2019: Kicked off project to migrate the mainframe from internally hosted to a full-service condic-hosted environment.				December 2019: Published final RFP:	January 2020: Announced Chicago- based Ensono as the Apparent Successful Vendor (ASV) for the Mainframa as a Servico (MFasS) Migration RFP.		March 2020: Signed contract with Ensono.	April 2020: Signed the Statement of Work (SOW).			July 2020: Shifted operational support of the mainframe computer environment to Ensono.	August 2020: Began preparing for migration in December to the Ensono- hosted mainframe by developing agency les plans, revising cest and priorig model, performing network an device configuration, and conducting policy restews.
Small Agency Support	August 2019: Completed ARTS Initial Discovery.	Soptember 2019:  Began MUM support for small agencies.  Began Server support for small agencies.  Completed Supplemental Dioson Package.  Mignated Arts Commission to Clerit. Network.  Completed TOS.		November 2019: Implemented MS learns for Waters Complexed PDC Initial Discovery.				March 2020:  • Approved supplemental DP for Smalls allocation.  • implemented MS Teams for ARTS, ACB DAHP, GOIA.				July 2020: Completed LEOFF Initial Discovery. Migrated OCLA has edited in the Committee of Commi	
						July 2019 - June 2020							
	hitial	ed IT support for the 14 agent	ties in the Small Agency a	flocation. This included full so	apport for the eight agencies	previously migrated to the e	Client Network and continui	ng migration activities and sup	oort for the six agencies need	ling to move to the eClient N	etwork.		
SAW (Multi-Factor Authentication)			October 2019: Launchad MFA Replacement project			January 2020: Onboarded MFA replacement vendors.					June 2020: Finalized Agency Engagement and Fransition Plan document (OCM) Completed IBM Design	July 2020: Provided first draft POC to SAW Technical and Business Advisory Group for review. Configured IBM application in	August 2020: Initialed usability testing for new MIFA interface. Configured IBM application in test environment.
	Developed and released and SAW Technical	August-October 2019: Identity and Access Managem and Business Advisory Group r	ent RFI, and SAW team eviswed responses.								•	development environment	
Cloud-based Backup Service (Replacement for Avamer Backup Platform)				November 2020: Kicked off project.	December 2020: Signed project chane: Formed two advisory groups. Began procurement of		February 2020: Published middleware RFI.	March 2020: Completed CCS Security Design Review consult	February - April 2020: Conducted RFI for backup solution to replace Avarrar.		June 2020: Completed middleware and Public Storage Proof of Concept (PoC).	July-August 2020: Progressing on PoC with solocted solution and AWS S3.	August-September 2 Implementing final approved backup architecture

### Strategic Roadmap – First-year progress (view higher resolution image here)

	August	September	October	November	December	January	February	March	April	May	June	July	August
									April 2020: Activated Azare Dev subscription.				
Private to Public								January 202	Present: Exploring Azure VI	fware on AWS and VMware S	crutions (AVS).		
Cloud Transition										April 2020-Pr	esent: Conducting Azure and	AWS training	
												July-Present: Execut implementation: (Proje	
OCIO Cloud Assessment	September 2019: Held formal factoff meeting, and inhoduced the vendor and the assessment methodology to the 79 in-scope agencies.								April 2020: Completed investory of agency IT assets	May 2020. Complete IT skills and training assessment.	June 2020:  Completed Deliverable 2 (Readiness Checi- list).  Submitted Deliverable 3 (Final Report) dred to OCID  Completed Welleds support for agency migrations analysis.  Conducted eventor-led future state cloud workshop for agency CIOs.	July 2020: Complexed IT contracts and coet/benefit analysis.	August 2020: Provided vendor' report on statewin abud readiness t OCIO September Submit OCIO's report statewide cloud nex to the Legisl
Colocation Quincy Replacement							February 2020: Kicked off consolidation planning meeting.	March 2020: Coordinated and conducted all activities necessary to consolidate enclosures in April and May.	April 2020: Completed first move consolidating the first two endosures in the WaTech QDC.	May 2020: Completed second more consolidating the second two enclosures in the WaTech QDC.			
Telephony Cloud PBX Microsoft 365	Aug 2019: Designed and built infrastructure and evoluside phone sets for Teams in Wallech pre-production environment.	Sep 2019: identified, documented, and tested Teams Talaphony administrator roles in WaTech preproduction environment.		Nov 2019: Fully configured War licelt pre-production erracomment to work both with Teams and the on-premipre-production Skype for Business.	Dec 2018: Started sexmonth project to prepare the Wall Tesh production environment for Teams Telephony.		Feb 2020: Developed Teams Telephany Fotes and Responseither mains document for all groups involved with configuring Teams Telephany	Mar 2020: Trained Wallech staff on administrating fearins Telephony	Apr 2020: Developed service description, onboarding documents, thranges to MS65 Cloud Terms of Service (TOS), rate analysis, and RACI matrix.	May 2020: Installed Audio Codes SIDC for Teams Rete phony Deved Route Launched the Teams Telephony product.	Assisting customer agenci place and receive phone	June 2020-Ongoing: es to migrate to Teams Teleph e calls from the Teams unfield	ony, adding the capa communication softw
		Started 6 month project	July 2019: to evoluate Teams in WaTer	ch pre-production environmer	,								
Network Modernization			March-October 2019: Completed IP-6 Phase 2 project. Deliverables included development of a High-level strategy and design preparing. Walfech to move forward to phase 3 implementation on		IPv6 Phase	3 project initiated. Proof of	concept lab has been comple		19 – Present: Implementation of IPv6 on th	ne WaTech Network Core sch	nedured for completion on Ju	ne 20, 2021.	

# Transformational Projects progress report

#### Shared Tenant/Microsoft 365

Beginning with a series of internal "pilot" projects, WaTech moved into a shared tenant environment for Microsoft 365 services in September 2019 to lower costs and improve work collaboration opportunities for state agencies. Under this model, strategic and business decisions are discussed first at the WaTech Advisory Council – composed of six CIOs elected by and chartered to represent the CIO community – and then submitted to the Enterprise Core Team for a final vote.

Milestones since September 2019:

- Sept. 2019: Opened the Enterprise Shared Tenant for Exchange Online, SharePoint and OneDrive; defined the Big 5 steps for agency readiness.
- Jan. 2020: Release 2 began to launch Teams, Dynamics 365 and Intune services. R2 kicked off Oct. 2019 and concluded in May 2020.
- March 2020: Public Folders migrated to Modern Public folders in Exchange Online (EXO).
- April 2020: Implemented Multi-Factor Authentication (MFA) for Outlook Web Access (OWA).
- June 2020: Completed Phase 2 of the project; M365 Release 3 Project began.
- July 2020: Parks email migrated to EXO.

As part of the shared tenant project, WaTech announced in March 2020 the "white glove" solution to migrate agency records out of the Vault. The current Vault environment is reaching end of life June 2022 and original estimates for migrating the content exceeded

\$2 million statewide. WaTech negotiated a contract with a vendor to handle the migration, with WaTech covering the entire third-party cost of the full migration if completed by June 2022.



Migrations began in May. In September, WaTech finished migrating all its active users and inactive users (archives from employees no longer active within the agency)

and created a schedule to migrate agencies based on the amount of vault data they use.

#### Mainframe as a Service

WaTech partnered with a third-party vendor in March 2020 to transition the current mainframe environment to a cloud-based solution. In July, the vendor assumed operational support of the current mainframe in Olympia and will migrate the workloads to their Omaha, Nebraska data center no later than Q1 2021.

With agency support to plan and test their workloads in preparation for the migration, WaTech has been executing the plan to deliver sustainable, cost-effective mainframe services. Over the last 12 months, WaTech has worked to optimize direct and support costs for mainframe services, already capturing \$2 million in annual savings. As a result, supplemental funding support from the Office of Financial Management (OFM) via the central service model will no longer be needed.

Additionally, WaTech will pass on more than \$2.5 million in additional savings annually to the state from the MFaaS contract. The savings will be passed through to agencies as price reductions beginning July 2021. This contract will also provide a reduction of more than 30% for most customer agencies, who will be able to capture these savings in their budgets for the upcoming biennium.



Once the migration is complete, the state can look forward to a top-tier solution for mainframe service at substantial savings, while also providing for a sustainable, supported and secured compute platform into the next decade.

#### IPv6

Internet Protocol version 4 (IPv4) became the international addressing standard in the early 1980s, but the American Registry for Internet Numbers (ARIN) started running out of IPv4 addresses by 2015.

WaTech's IPv6 project is working to upgrade the number of internet numbers available. Adoption of IPv6 will allow for the continued expansion of internet-connected devices.

Through proof-of-concept testing, the agency has now learned how to best configure a dual-stack environment to route both IPv4 and IPv6 for state agencies. WaTech is working with multiple consultants on how to best deploy IPv6 across state government, as well as securing more funding for the project.

An actionable plan on how to configure and deploy IPv6 with WaTech's network core and Wide Area Network (WAN) is also under way.

If all goes as planned, WaTech expects to have the network core ready to route customer IPv6 traffic by June 2021.

#### Backup Service and Storage

Since February 2020, the Backup Service and Storage Solution (BS&ST) team has been working hard to select a replacement solution for the Dell Avamar and Data Domain platform.

The team posted a Request for Information, conducted proof of concepts (POCs) and

worked with the Office of Cybersecurity on the security design review. The team selected Veeam to replace Avamar and decided to use WaTech's existing NetApp storage to replace the Dell Data Domain.

Backups will be made on-premise as well as copied to two cloud storage locations, one of which will be immutable storage. The team is currently migrating existing customers to our new cloud solution and will decommission the Avamar and Data Domain environment beginning December 2020.

The introduction of a much less expensive onpremise storage device at the primary site will result in significant savings, both from an operational and financial standpoint. These savings will be transferred to our customers. It is also anticipated this project will meet the needs of current and future customers, providing the same or better level of service.

#### **Small Agency Support**

Since July 2019, WaTech has onboarded and is providing support for 14 small agencies. This support is tailored to each small agency, providing them with the technical staff and resources they typically lack to manage and administer their own technology needs and requirements, such as infrastructure services, endpoint management and desktop support, chief technology and security officer consulting.

#### Current work includes:

Migrating the Public Disclosure
 Commission to the shared tenant for
 Office 365 (they are currently in their own
 O365 tenant).



Migrating the Board of Accountancy, Department of Archaeology and Historic Preservation, Law Enforcement Officers and Fire Fighters Plan 2 Retirement Board, and Public Disclosure Commission from the Shared Services (SSV) domain to the eClient Active Directory domain. The eClient domain is where WaTech and all the supported small agencies reside. By having all the supported agencies in one domain, WaTech can provide better support because it can apply policies to users and computers all in one place instead of many, allowing better management of user accounts and end devices (computers, laptops, etc.).

Over the next few years, the program will expand support offerings to include Intune for mobile device management and use of Office365 tools including SharePoint, Teams, Teams Telephony and other O365 tools. The ultimate goal is to increase the service offering to other small agencies. As the customer base grows, agencies will benefit from economies of scale for support.

#### Replacement of Multi-Factor Authentication for SecureAccess Washington

WaTech has continued to make improvements in SecureAccess Washington (SAW), which many state agencies use to provide their customers access to their online services. SAW provides self-administered, single sign-on access to over 300 agency applications for more than 20 state agencies. SAW ensures security and privacy for the user and online service. SAW enrollment is currently around nine million user accounts, with 556,000 utilizing Multi-factor Authentication (MFA).

WaTech is in the process of modernizing SAW's MFA method. The agency is replacing the existing MFA solution with a more cost-effective, integrated IBM MFA solution by

December of 2020. The IBM solution has been configured and the team is working to develop the user interface as well as integration points with partner agencies.

#### Private to Public Cloud transition

WaTech has continued to ramp up its capabilities for both the public and private cloud. The private cloud, which WaTech calls the Washington State Cloud, is in the State Data Center. WaTech's public cloud services provide agencies with the ability to host applications through third-party providers, such as Microsoft Azure or Amazon Web Services. In addition, WaTech launched its Cloud Highway service, which assures secure, high-speed connectivity to the Seattle Westin Building Exchange (WBX) and to the state's data center in Quincy.

#### Statewide Cloud Readiness Assessment

The state Legislature, in the 2019-21 operating budget, directed the Office of the Chief Information Officer (OCIO) to conduct a statewide cloud computing readiness assessment to prepare for the migration of core services, including ways it can leverage cloud computing to reduce costs.

The goal of the assessment is to help the state determine its ability to successfully adopt and support cloud solutions, as well as provide a current-state account of technology assets and future opportunities.

The Legislature in <u>Engrossed Substitute House</u>
<u>Bill 1109</u> (the state budget) directed the OCIO
to:

- Create an inventory of current state agency assets, associated service contracts and other relevant information.
- Identify impacts to state agency staffing resulting from the future migration to cloud computing including: skill gaps



between current practices and future cloud services; necessary retraining and ongoing training and development; and identifying additional resources needed by WaTech to enable sufficient future cloud migration support to state agencies.

The vendor on the project presented the Statewide Cloud Readiness Assessment report to the OCIO in September 2020. The OCIO EA Team has begun drafting the cloud readiness report for delivery to the Legislature and the governor in December 2020.

### Quincy Data Center (QDC) consolidation

The WaTech Quincy Data Center's (QDC) 5,000 square-foot space has reached its working capacity. In order to provide the Employment Security Department (ESD) with the enclosures they require for their colocation, a series of consolidations were initiated.

Consolidating equipment reduces the number of enclosures used by the agencies involved, allowing more efficient use of the QDC. This mitigates building out a new data hall for WaTech at considerable expense, while buying time for agencies that are planning to move infrastructure to cloud environments.

As of this report, the project has accomplished the following:

- Consolidation of WaTech's equipment.
   This was completed and provided two full enclosures.
- Working with DSHS to consolidate their equipment. DSHS has agreed to consolidate their enclosure space, which will empty three full enclosures.

With the power work scheduled for completion by Nov. 13, WaTech and DSHS will have time to perform the equipment moves for DSHS before moving ESD's equipment, anticipated to begin January-February 2021.





### COVID-19 response

COVID-19 presented Washington with an extraordinary challenge when the state transitioned to a full-time remote workforce.

Washington was not resourced to support 100% of state employees teleworking every day. WaTech served a crucial role in response to the pandemic – ensuring that agencies' personnel could pivot and work remotely and as securely as possible. Main priorities included keeping the state's network in full operation, increasing capacity for connectivity through VPN and telephony services, and building security around the state's unemployment insurance portal.

Significant effort was invested in:

Supporting the technology platform (SSL VPN) for nearly 40,000 concurrent remote connections. In March 2020, WaTech tripled the capacity for concurrent sessions by increasing seat licensing and hardware installations, adding additional IP Pools needed for VPN connections, and conducting



emergency system load balancing work to ensure VPN connectivity. The state CIO froze the billing for state agencies through July 2020 to help with the increased needs for remote employees.

- Developing new ways to patch endpoints (user workstations) since the endpoints are no longer physically present in the respective office locations.
- Procuring additional encryption modules for remote connections to support federal regulatory requirements that did not apply

- when that data was accessed strictly from within the organization.
- Accelerating the need to secure endpoints (use workstations) using advanced technologies due to the significant increase in cyberattacks both in the state of Washington and across the nation.
- Layering assets and workflows more prone to credential harvesting and compromise with multi-factor authentication technology.
- Providing support to the Office of the Governor for conducting virtual press conferences through video conference technologies, and redirecting phone calls to the WaTech Support Center and other staff to help with the heavy volume.
- Installing software applications on scores of state agencyassigned laptops that allow remote workers to



- answer their phones as though they are at their work desks.
- Setting up numerous conference bridge lines and videoconference sessions for state agency personnel like the judicial system to replace in-person hearings.

WaTech partnered with the Department of Health (DOH) to launch a chatbot on the DOH website to help answer questions in real time. WaTech also resolved a secure data transfer issue between hospital systems and a central state database with pandemic data.



The Web Services Team rapidly designed and launched coronavirus.wa.gov, which serves as the state's central clearinghouse for information through the Joint Information Center at Camp Murray. The site, which received two million visits during the first month, is the central resource for all Washington state information about the COVID-19 pandemic.



The Web Services team later partnered with a local usercentered design firm and the JIC to redesign and reimagine

the site for long-term sustainability. Additionally, they have developed several web forms for collection of COVID-related data and are finalizing a case management system which allows multiple agencies to manage COVID-19 violation reports.

The Geographic Information Systems group converted DOH statistical information to an easy-to-view geographical format with nearly real-time COVID-19 data, displayed by county. The team also assisted the Department of Military with the collection and display of other data critical to the state's response and became an integral part of the Emergency Operations Center team at Camp Murray.

WaTech Emergency Management & Preparedness (EMP) team was summoned to the State Emergency Operations Center (SEOC) to assist with the development of the state's nonpharmaceutical interventions (NPIs) in order to capture the various impacts to state government, its residents and its services.

These NPIs were later provided to the governor to prepare the first round of response efforts to curb further spread.

WaTech's EMP team also worked with several agencies to compile a list of measures to implement for the 1500 Jefferson Complex and State Data Center. A taskforce of designated subject-matter experts comprising 1500 Jefferson agency tenants and property management developed common ground rules for navigating the office building including changing procedures to promote social distancing, mandating face masks when on-site and requiring all employees to sign into the office log to assist in contact tracing. Additional

#### OCIO's Geospatial Office

The OCIO's Geospatial Office has collaborated with several state agencies for the COVID-19 emergency response including the Washington State Emergency Operations Center, the Department of Health, the Department of Social and Health Services and the Department of Commerce. Together the teams developed over 50 maps, 52 applications and 75 data sets to support emergency management operations and response. Applications included mapping locations of publicly available Wi-Fi sites to support telemedicine, remote work and distance learning as well as food bank locations and childcare locations for essential workers.

changes to the facility included erecting barriers, signage and sneeze guards; removal/repositioning office seating; improving/increasing facility ventilation; and changing pedestrian traffic patterns to decrease risk footprint.



### Strategic priorities

As a result of the Strategic Roadmap planning in 2019, WaTech established the agency's future focus in alignment with these core business areas:

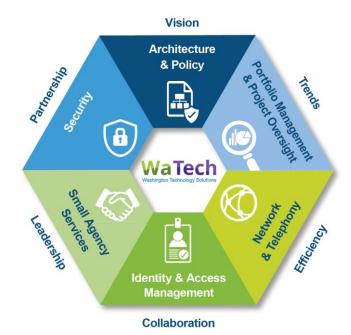
- Architecture and policy.
- Portfolio management and project oversight.
- Security services.
- Identity and access management.
- Network and telephony services.
- Small agency support.

These focus areas will serve as the agency's policy and operational goals and guide our efforts moving forward. Along with the initiatives outlined in the Strategic Roadmap, these strategic priorities will transform, modernize, and greatly improve our ability to manage the state's progressively diverse IT landscape.

#### Moving to a Brokered Service Model

Increasingly states are offering centralized IT services through a brokered service model. With rapid technology advances, customer demand for new services outpaces the central service provider's ability to support legacy technology and an infinite amount of new tech.

In a brokered model, the central IT organization becomes the avenue for establishing relationships with external providers that can pivot quickly to support both emerging needs and technology innovation. The model supports better pricing, better management of vendor terms and performance and allows for varying agency adoption rates. The workforce changes from providers to vendor management with a healthy dose of consultative skills. Investments in training and organizational change



management are key considerations in moving to the brokered model.

### Increased emphasis on statewide architecture

Digital transformation of government will continually evolve as technology changes, but the rate of change is accelerating rapidly along with customer expectations. Citizens are accustomed to the "Amazon experience" and expect the same from interactions with government. This transformation requires a disciplined approach that balances reuse and integration of existing systems while embracing the diversity and agility of more modern and efficient technologies.

Enterprise architecture (EA) is the discipline that translates business vision and strategy into effective enterprise change. EA uses structured practices to analyze, plan and oversee the transformation of technology strategies and policies over time.



The state enterprise architecture program has been an area of underinvestment in past years. However, WaTech is committed to expanding the state's EA capabilities in order to accelerate the modernization and digital transformation of state government. This is being done by further expanding staff levels in the enterprise architecture program, increasing architecture collaboration with strategic initiatives like One Washington, and implementing a cloud-based EA data analysis and planning tool.

### Investing in threat-centric cybersecurity management and governance

WaTech's state Office of Cybersecurity (OCS) is currently going through an organizational redesign to ensure the state is well positioned to meet evolving threats. OCS has also begun creating a sustainable cybersecurity operational plan for the state of Washington that takes a threat-centric approach where everyone in government works collaboratively to combat common threats. OCS submitted a draft legislative proposal to formalize this effort.

The state plan is organized around five main goals, referenced in state law, and identifies enhancements to existing initiatives to accomplish the goals through measurable actions.

### Modernizing state agency privacy protection

Planned investments will develop a privacy program framework for state agencies, acquire standardized privacy training for state agencies and increase staffing levels to support improved agency programs, provide increased levels of consultation to local and tribal governments, and provide best practice information to



#### **OCS Operational Plan Goals**

Goal #1: Ensure the confidentiality, integrity and availability of the information transacted, stored or processed in the state's information technology systems and infrastructure.

Goal #2: Protect all state information technology assets by a centralized cybersecurity protocol.

Goal #3: Detect, respond to and report all levels of security incidents consistent with information security standards and policies. Ensure the continuity of commerce for information resources that support state agencies' operations and assets in the event of a security incident.

Goal #4: Advance the security program in the state of Washington.

Goal #5: Position Washington as a national leader in cybersecurity.

consumers. The office is working on a four-year progress report for the Legislature, to be delivered by December 31, 2020. Multiple privacy bills, including facial recognition, use of algorithms for decision making and general privacy protections were introduced in prior legislative sessions and are expected again in the 2021 session.



### By the numbers

(January 2019 - June 2020)



339 State Data Center enclosures



1.8M+
Total Mainframe customer jobs





10,800+ TEAMS USERS INTHE SHARED TENANT



78,210

Exchange mailboxes managed by enterprise

SecureAccess Washington (SAW)

9.04M Total SAW Usernames

(By Month-End totals, Includes active, inactive, suspended and duplicate users as of June 2020)



99.95% AVERAGE UPTIME

(January 2019-June 2020)

### **Support Center**



Total support

296,992 SUPPORT TICKETS CREATED (incidents and requests) 294,275 SUPPORT TICKETS CLOSED



### **End-of-transaction survey results**









### Contact

Questions regarding the Annual Report can be directed to:

Vickie Sheehan Communications Director vickie.sheehan@watech.wa.gov

